

MARKED-UP VERSION OF AMENDED CLAIMS

AMENDMENTS

Amendments to the claims

In the below amended claims 1-25, underlining indicates insertions, and bracketing [] indicates deletions. Newly added claims 26-74 are only shown in the "clean version", wherein all claims amended and added are shown, so please use the herewith "clean" version as the claims to be examined and found allowable. Thank you.

1. (once amended) An improved method of using a two hand held game controller structured with a housing formed to be held by a user in two hands simultaneously, said housing having a left-hand area and a right-hand area, located in said left-hand area is a depressible pad having four codependant areas, located in said right-hand area is a plurality of single individual depressible buttons; said game controller for controlling a simulated game character by way of depressing a portion of said depressible pad and depressing said single individual depressible buttons; a television displaying said simulated game character; wherein the improved method comprises the steps:
depressing said portion of said depressible pad for at least in part controlling said simulated game character;
depressing a first one of said single individual depressible buttons with varying pressure for at least in part varying action intensity of said simulated game character;
depressing a second one of said single individual depressible buttons with varying pressure for at least in part varying action intensity of said simulated game character.

[An improved method of controlling action intensity of a simulated game character by way of depressing at least one depressible single button located on a two-hand held housing, said single button for activating one single pressure-sensitive

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analog sensor, said pressure-sensitive analog sensor electrically connected to electronics, said electronics including means for controlling a display, said display for displaying said simulated game character;

wherein the improvement includes the step
depressing, using a digit of a human user's hand, said depressible single button with varying degrees of pressure for varying the action intensity of said simulated game character.]

2. (once amended) An improved method of using a two hand held game controller [controlling action intensity of a simulated game character] according to claim 1 wherein [said] the action intensity is at least represented by movement speed of said game character, [whereby] wherein said game character moves [slowly] at a first speed with [low] a first depressive pressure [applied to said button], said game character moves [faster] at a second speed with a second [increased] depressive pressure [applied to said button], said second depressive pressure is greater than said first depressive pressure, and said second speed is different from said first speed.

3. (once amended) An improved method of using a two hand held game controller [controlling action intensity of a simulated game character] according to claim 1 wherein [said] the action intensity is at least represented by jumping height of said game character, [whereby a human user depresses said button using low] wherein a first depressive pressure [causing] causes said character to jump a [low] first height, and [the human user depresses said button using] a second [higher] depressive pressure causes [causing] said character to jump a [higher] second height.

4. (once amended) An improved method of using a two hand held game controller [controlling action intensity of a simulated game character] according to claim 1 wherein said game character

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is a simulated car, said car is slowed proportionally to increasing depressive pressure [applied by the user to said button].

5. (once amended) An improved method of using a two hand held game controller [controlling action intensity of a simulated game character] according to claim 1 wherein said game character is a simulated gun, said varying [degrees of pressure] pressure for varying fire rate of said gun.

6. (once amended) An improved method of using a two hand held game controller structured with a housing formed to be held by a user in two hands simultaneously, said housing having a left-hand area and a right-hand area, located in said right-hand area is a plurality of single individual depressible buttons; said game controller for controlling a simulated game character by way of depressing said single individual depressible buttons; wherein the improved method comprises the steps:
depressing a first one of said single individual depressible buttons with varying degrees of pressure for at least in part varying action intensity of said simulated game character;
depressing a second one of said single individual depressible buttons with varying degrees of pressure for at least in part varying action intensity of said simulated game character.

[An improved method of controlling action intensity of a simulated game character by way of depressing at least one single depressible button, using only a single digit of a human user's hand, said single depressible button for activating a single sensor; wherein the improvement includes the step

depressing said depressible button with varying degrees of pressure for varying the action intensity of said simulated game character.]

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7. (once amended) An improved method of using a two hand held game controller according to claim 6 wherein the action intensity is at least represented by jumping height of said game character, wherein a first depressive pressure causes said character to jump a first height, and a second depressive pressure causes said character to jump a second height.

[An improved method of controlling action intensity of a simulated game character according to claim 6 wherein said action intensity is at least represented by movement speed of said game character, whereby said game character moves slowly with low depressive pressure applied to said button, said game character moves faster with increased depressive pressure applied to said button.]

8. (once amended) An improved method of using a two hand held game controller according to claim 7 wherein said housing further supports in said left-hand area a depressible pad having four codependant areas, and

wherein the improved method comprises the step:

depressing a portion of said depressible pad for at least in part controlling said simulated game character.

[An improved method of controlling action intensity of a simulated game character according to claim 6 wherein said action intensity is at least represented by jumping height of said game character, whereby a human user depresses said button using low depressive pressure causing said character to jump a low height, and the human user depresses said button using higher depressive pressure causing said character to jump a higher height.]

9. (once amended) An improved method of using a two hand held game controller according to claim 6 wherein said game character is a simulated car, said car is slowed proportionally

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to increasing depressive pressure.

[An improved method of controlling action intensity of a simulated game character according to claim 6 wherein said game character is a simulated car, said car is slowed proportionally to increasing depressive pressure applied by the user to said button.]

10. (once amended) An improved method of using a two hand held game controller according to claim 9 wherein said housing further supports in said left-hand area a depressible pad having four codependant areas, and

wherein the improved method comprises the step:

depressing a portion of said depressible pad for at least in part steering said car.

[An improved method of controlling action intensity of a simulated game character according to claim 6 wherein said game character is a simulated gun, said varying degrees of pressure for varying fire rate of said gun.]

(once amended) [8.] 11. A game control comprising:

a housing to be grasped and held simultaneously by two hands of a human user during use, said housing including a right-hand area and a left-hand area, said right-hand area being an area for grasping by the user's right hand, said left-hand area being an area for grasping by the user's left hand;

a plurality of depressible electricity manipulating devices each at least in-part exposed on said housing, at least some of said plurality of electricity manipulating devices positioned on said housing to be within reach of the user's right-hand thumb;

at least one of said electricity manipulating devices is a pressure-sensitive variable-conductance sensor operable by a depressible individual button located within said right-hand area

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and reachable by the user's right-hand thumb, said variable-conductance sensor including means for creating an analog electrical signal representing varying applied physical pressure; at least one of said electricity manipulating devices including means for creating an On/Off signal; each of said electricity manipulating devices electrically connected to electronics means for at least reading the signals of said electricity manipulating devices.

12. (once amended) A game control according to claim 11 wherein said electronics means [includes an ASIC] further for reading said at least one of said electricity manipulating devices including means for creating an On/Off signal, exclusively as an On/Off switch.

13. (once amended) A game control according to claim 11 wherein [said] the signals represent operation of said variable-conductance sensor. [at least one of said electricity manipulating devices including means for creating an analog electrical signal representing varying applied physical pressure, and said at least one of said electricity manipulating devices including means for creating an On/Off signal, are a single said electricity manipulating device.]

14. (once amended) A game control according to claim [13] 11 wherein said electronics means includes an ASIC, and said pressure-sensitive variable-conductance sensor further includes a resilient dome cap carrying a conductive material on an underside of said dome-cap, said conductive material having a deformable shaped surface, wherein with a first level of applied pressure to said button said deformable shaped surface establishes a first electrical contact area, with a second level of applied pressure to said button said deformable shaped surface establishes a second electrical contact area, said second electrical contact area is larger than said first electrical contact area and

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electrical resistance of said sensor is larger with said first level of applied pressure than the electrical resistance of said sensor with said second level of applied pressure.

15. (once amended) A game control comprising:

a housing to be grasped and held simultaneously by two hands of a human user during use, said housing including a right-hand area and a left-hand area, said right-hand area being an area for grasping by the user's right hand, said left-hand area being an area for grasping by the user's left hand;

a plurality of depressible electricity manipulating devices each at least in-part exposed on said housing;[, at least some of said plurality of electricity manipulating devices positioned on said housing to be within reach of the user's right-hand thumb;]

at least one of said electricity manipulating devices positioned within said right-hand area is a pressure-sensitive variable-conductance sensor actuated by a single independent button, said sensor comprising:[:]

a depressible resilient dome cap [supporting] positioned over

conductive material [in a raised position above] positioned in proximity to

circuit trace means for conducting electricity [traces with said sensor in an open position indicating an Off output], said resilient dome cap depressible to electrically contact said conductive material with said circuit trace means [traces to form a closed position indicating an On output], said [conductive material being] pressure-sensitive variable-conductance [material] sensor for creating analog output proportional to varying physical pressure applied to said sensor [by the user's digit]; said sensor electrically connected to

active electronics means for interpreting the [outputs] analog output of said pressure-sensitive variable-conductance sensor.

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16. (once amended) [An electricity manipulating] A pressure-sensitive variable-conductance sensor for a control device, said sensor comprising;
a depressible resilient dome cap [supporting conductive material] having a surface with an apex [in a raised position] positioned above

circuit trace means for conducting electricity, [traces with said sensor in an open position indicating an Off output,] said resilient dome cap depressible [to contact said conductive material with said circuit traces to form a closed position indicating an On output, said conductive material being pressure-sensitive variable-conductance material] for creating analog output proportional to varying physical pressure applied to said dome cap [by the user's digit]; said surface with an apex is flexible, deforming with additional physical pressure to flatten and cause additional surface area contact to provide changes in electrical conductivity in said sensor; said sensor electrically connected to

active electronics means for interpreting the electrical conductivity [outputs] of said sensor.

17. (once amended) [An electricity manipulating] A pressure-sensitive variable-conductance sensor for a control device according to claim 16 wherein said sensor is depressible by force applied by a single digit of a human user's hand.

18. (once amended) [An electricity manipulating] A pressure-sensitive variable-conductance sensor for a control device according to claim 17 wherein said active electronics means at least includes an ASIC, and said electrical conductivity is resistive in nature.

19. (once amended) [An electricity manipulating] A pressure-sensitive variable-conductance sensor for a control

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device according to claim 17 wherein said control device is a game control device including a housing to be grasped and held simultaneously by two hands of the human user during use, said housing including a right-hand area and a left-hand area, said right-hand area being an area for at least grasping by the user's right hand, said left-hand area being an area for at least grasping by the user's left hand, said sensor located in said right-hand area to be depressed by the human user's right-hand thumb.

20. (once amended) A game control comprising:

a housing to be grasped and held simultaneously by two hands of a human user, said housing including a right-hand area and a left-hand area, said right-hand area being an area for grasping by the user's right hand, said left-hand area being an area for grasping by the user's left hand;

a plurality of depressible electricity manipulating devices each at least in-part exposed on said housing[, at least some of said plurality of electricity manipulating devices positioned on said housing to be within reach of the user's right-hand thumb];

at least one of said electricity manipulating devices is a pressure-sensitive variable-conductance sensor located in said right-hand area for being depressed by the user's right-hand digit, said pressure-sensitive variable-conductance sensor including means for creating an On/Off output, and with varied pressure creating an analog output;

active electronics means for at least interpreting the outputs of said pressure-sensitive variable-conductance sensor.
[at least one electricity manipulating device.]

21. (once amended) A game control according to claim 20 wherein said electronics means includes an ASIC, and said pressure-sensitive variable-conductance sensor includes flexible material having a substantially convex surface, said material deforming with additional pressure to flatten causing contact of

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additional surface area to provide conductivity changes of said sensor.

22. (once amended) A method of manufacturing a game control, including the steps:

a) [forming] providing a housing shaped to be held simultaneously by two hands of a human user, said housing formed with a right-hand area and a left-hand area;

b) assembling electronics into said housing;

c) installing electricity manipulating devices connected to said electronics;

d) positioning said electricity manipulating devices in-part exposed on said housing to be depressed by digits of the human user's hand;

e) installing into said right-hand area of said housing at least [one] two single individual button depressible pressure-sensitive variable-conductance analog sensors [sensor], said [sensor] sensors connected to said electronics, said [sensor] sensors independently depressible by a single digit of a human user's right hand.

23. (once amended) A method of manufacturing a game control according to claim 22 further including the step

installing [a] resilient dome caps [cap] located to be operational with pressure-sensitive material of said pressure-sensitive variable-conductance analog sensors [sensor].

24. (once amended) A method of manufacturing a game [controls] control according to claim 22 further including the step

installing [an] injection molded rubber dome caps [cap] located to be operational with said pressure-sensitive variable-conductance analog sensors [sensor].

25. (once amended) A method of manufacturing a game control

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according to claim 24 further including the step

installing [an individual depressible button for activating said] in said left-hand area of said housing a depressible pad associated with four of said electricity manipulating devices.
[pressure-sensitive analog sensor.]

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